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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,129	02/23/2000	TOSHIYUKI MIYABAYASHI	U012618-1	3476

7590 02/10/2005

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26 WEST 61ST STREET
NEW YORK, NY 10023

EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/486,129

Applicant(s)

MIYABAYASHI ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-9,17-21,23-29,31,32,34,35 and 37-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-9,17-21,23-29,31,32,34,35 and 37-43 is/are rejected.
- 7) ☒ Claim(s) 44-45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 11/15/04.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3-4, 6-7, 17-18, 20-21, 23-25, 37-40, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. 5,990,202) in view of Page et al. (U.S. 6,040,358).

The disclosure is adequately set forth in paragraph 6 of the office action mailed 8/10/04 and is incorporated here by reference.

4. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. in view of Page et al. as applied to claims 1, 3-4, 6-7, 17-18, 20-21, 23-25, 37-40, and 42 above, and further in view of Takemoto et al. (U.S. 6,084,619).

The disclosure is adequately set forth in paragraph 7 of the office action mailed 8/10/04 and is incorporated here by reference.

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5. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. in view of Page et al. as applied to claims 1, 3-4, 6-7, 17-18, 20-21, 23-25, 37-40, and 42 above, and further in view of Chassot et al. (U.S. 5,348,580).

The disclosure is adequately set forth in paragraph 8 of the office action mailed 8/10/04 and is incorporated here by reference.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. in view of Page et al. as applied to claims 1, 3-4, 6-7, 17-18, 20-21, 23-25, 37-40, and 42 above, and further in view of Durand et al. (U.S. 5,093,038).

The disclosure is adequately set forth in paragraph 9 of the office action mailed 8/10/04 and is incorporated here by reference.

7. Claims 26, 28-29, 31-32, 34-35, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. (U.S. 5,990,202) in view of Page et al. (U.S. 6,040,358).

The disclosure is adequately set forth in paragraph 10 of the office action mailed 8/10/04 and is incorporated here by reference.

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. in view of Page et al. as applied to claims 26, 28-29, 31-32, 34-35, and 43 above, and further in view of Durand et al. (U.S. 5,093,038).

The disclosure is adequately set forth in paragraph 11 of the office action mailed 8/10/04 and is incorporated here by reference.

Response to Arguments

9. Applicants' arguments filed 11/15/04 have been fully considered but they are not persuasive.

All the present claims of record require that the polymer encapsulated colorant is produced by polymerizing monomers for constituting the polymer in the presence of the dye or pigment.

There is no disclosure in Nguyen et al. that the polymer encapsulated colorant is formed as required in the present claims. Rather, Nguyen et al. produce polymer encapsulated colorant by mixing or milling the polymer and the colorant together. However, although the process of Nguyen et al. is different than that presently claimed, it is the examiner's position that given that Nguyen et al. disclose the same product as presently claimed, and absent a showing of the criticality of the presently claimed process, Nguyen et al. remains a relevant reference against the present claims.

Applicants filed a first 1.132 declaration on 2/20/04 and a second 1.132 declaration on 11/15/04 in order to show that the product, i.e. ink, of Nguyen et al. is not the same as the presently claimed product and to establish criticality of the presently claimed process used to make the polymer encapsulated colorant.

The declaration compares ink inside the scope of the present claims, i.e. comprising polymer encapsulated colorant produced by polymerizing monomers constituting the polymer in the presence of the colorant (Ink 1) with ink outside the scope of the present claims but within the scope of Nguyen et al., i.e. comprising polymer encapsulated colorant produced by milling

polymer and colorant (Ink 6). It is shown that the ink of the present invention is superior in terms of light stability.

However, it is the examiner's position that the declaration is not successful in establishing unexpected or surprising results over the cited prior art given that there is not proper side-by-side comparison between inventive Ink 1 and comparative Ink 6. Specifically, as set forth in the 1.132 declaration filed 2/20/04, Ink 1 uses polymer encapsulated colorant wherein the polymer is obtained from 20 g butyl acrylate, 30 g benzyl methacrylate, 12 g methacrylic acid, 18 g monomer having UV absorbing activity, and 2 g monomer having photostabilizing activity while Ink 6, as set forth in the 1.132 declaration filed 11/15/04, uses polymer encapsulated colorant wherein the polymer is obtained from 20 g butyl acrylate, 12 g benzyl methacrylate, 5 g methacrylic acid, 18 g monomer having UV absorbing activity, and 2 g monomer having photostabilizing activity. Thus, the polymers are made from different amounts of monomers.

The above is especially significant in light of the disclosure on page 12 of the amendment filed 11/15/04. The table on page 12 shows that the polymer of Ink 6 and Ink 1 are the same. However, the amounts of monomer set forth in the table of the amendment do not match the amounts of monomer set forth in either of the 1.132 declarations. Specifically, the 1.132 declaration of 2/20/04 shows polymer of colorant 1 for Ink 1 comprises 30 g benzyl methacrylate while the table in the amendment shows that the polymer utilizes 12 g benzyl methacrylate and the 1.132 declaration of 11/15/04 shows that the polymer of polymer emulsion B utilized in Ink 6 comprises 5 g methacrylic acid while the table in the amendment shows that the polymer utilizes 12 g methacrylic acid. Thus, it is not clear which values are correct; those set forth in the table on

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page 12 of the amendment filed 11/15/04 or those in the 1.132 declarations. Clarification is requested.

In light of the above, it is the examiner's position that the 35 USC 103 rejections of record remain relevant against the present claims.

Allowable Subject Matter

10. Claims 44-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 44 would be allowable if rewritten in independent form for the reasons set forth in paragraph 12 of the office action mailed 8/10/04.

Claim 45 would be allowable if rewritten in independent form given that the claim requires that the polymer encapsulated colorant "consists of" dye or pigment and the polymer having in its molecular chain sites possessing ultraviolet and photostabilizing activity. It is noted that the use of "consisting of" transitional languages limits the scope of the claim to the recited elements. However, Nguyen et al. (U.S. 5,990,202) disclose polymer encapsulated colorant that is encapsulated by two polymers, i.e. durable core-shell polymer and primer core-shell polymer wherein the primer core-shell polymer does not have in its molecular chain sites possessing ultraviolet and photostabilizing activity. Thus, the polymer encapsulated colorant disclosed by Nguyen et al. falls outside the scope of present claim 45.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

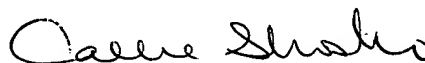
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
2/4/05